

Appl. No.: 09/745,289  
Amdt. dated 01/04/2005  
Reply to Official Action of October 7, 2004

### REMARKS/ARGUMENTS

Applicants appreciate the thorough examination of the present application, as evidenced by the first Official Action. The Official Action rejects Claims 14, 21 and 26 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. More particularly, the Official Action alleges that the terms "approximately" and "substantially" of Claims 14, 21 and 26 are indefinite. The Official Action also rejects Claims 1, 3-15 and 17-42 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,446,066 to Horowitz, in view of U.S. Patent No. 6,298,357 to Wexler et al. In addition, the Official Action rejects Claims 2 and 16 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz patent in view of the Wexler patent, and further in view of U.S. Patent No. 6,671,853 to Burkett et al.

In response to the first Official Action, Applicants have amended independent Claims 1, 13, 14, 17, 26 and 37-39, and dependent Claim 29, to more clearly define the claimed invention and to correct various inadvertent grammatical and typographical errors. Applicants have also amended independent Claim 14 to include the recitation of dependent Claim 15 to more clearly define the claimed invention. Applicants have therefore accordingly cancelled dependent Claim 15. Further, Applicants have amended dependent Claim 2 to correct an inadvertent error, with Claim 2 now being consistent with dependent Claim 16.

As explained below and in contrast to the allegations of the first Official Action, Applicants respectfully submit that the claimed invention of Claims 14, 21 and 26 are definite within § 112, second paragraph. Applicants also respectfully submit that the claimed invention of Claims 1, 3-14 and 17-42 is patentable over the Horowitz and Wexler patents, taken individually or in combination; and that the claimed invention of Claims 2 and 16 is patentable over the Horowitz, Wexler and Burkett patents, taken individually or in combination. Thus, Applicants respectfully traverse the rejections of the claims as being indefinite and/or unpatentable over various combinations of the Horowitz, Wexler and Burkett patents. In view of the remarks presented herein, Applicants respectfully request reconsideration and allowance of all of the claims of the present application.



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***A. Claims 14, 21 and 26 are Definite***

As indicated above, the first Official Action rejects Claims 14, 21 and 26 as being indefinite, more particularly alleging that the terms "approximately" and "substantially" of Claims 14, 21 and 26 render those claims indefinite. Applicants respectfully submit, however, that Claims 14, 21 and 26 are definite within § 112, second paragraph. In this regard, as explained in section 2173.02 of the MPEP, claim language is deemed acceptable if one of ordinary skill in the art would understand what is claimed in light of the specification, the teachings of the prior art and the level of skill in the art. Terms of degree, such as "approximately" and "substantially," do not per se render a claim indefinite. Such terms are commonly used to define a claimed invention, and the courts have recognized that these terms as definite. See MPEP § 2173.05(b), sub-paragraph D (discussing use of the term "substantially").

In the present application, Applicants have provided a full and complete disclosure of the claimed invention, including an extensive written description of embodiments of the claimed invention as well as numerous figures with differing views of embodiments of the claimed invention. Applicants respectfully submit that one skilled in the art would appreciate and readily understand the meanings of the terms "approximately" and "substantially" as those terms are used in various claims of the present application. Moreover, the Official Action has not pointed to any specific reason to support the position that the terms as used are indefinite, except to say that the terms are indefinite. Yet the MPEP states that the mere presence of relative terminology such as "approximately" and "substantially" does not automatically render a claim indefinite. MPEP § 2173.05(b). Accordingly, Applicants respectfully submit that the rejection of Claims 14, 21 and 26 under 35 U.S.C. § 112, second paragraph as being indefinite, is overcome.

***B. Claims 1, 3-14 and 17-42 are Patentable over Horowitz/Wexler***

As also indicated above, the first Official Action rejects Claims 1, 3-14 and 17-42 as being unpatentable over the Horowitz patent, in view of the Wexler patent. The Horowitz patent provides a system and method for performing text-based searches of a database. As disclosed, a



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database is inverted by first dividing documents stored in the database into subdocuments. For example, a document can be divided into subdocuments along paragraph breaks in the document, although long paragraphs may be broken into several subdocuments and short paragraphs may be aggregated into a single subdocument. Then, the subdocuments are traversed to generate term lists associating subdocument terms and identifiers of corresponding subdocuments within which the terms occur. After inverting the database, the subdocument lists are represented with encoded bit strings, from which logical combinations can be obtained by identifying the intersection, union, and/or inversion of a plurality of the bit strings. And as keywords for a database search can be identified by selecting terms of the inverted database, the logical combinations of bit strings can be used to represent text-based search results over the database.

The Wexler patent provides a system and method for extracting structure information from an unstructured electronic document. As disclosed, the method includes building a tree structure that represents the hierarchical organization of an unstructured document. For example, as shown in FIG. 8 of the Wexler patent, the tree structure of a document (Root) can include segments representing chapters (C1 – C3) and an appendix (A1), two of which include a pair of sections (S1, S2 for each of C2 and C3). As also shown, one of the chapters and each of the sections include a plurality of paragraphs (P1 – Pn). As also disclosed, a structured representation of the unstructured document is built based upon the tree structure, where the structured representation can be divided into sub-documents. In this regard, the document can be divided into subdocuments for each section (S1, S2 for each of C2 and C3) of the document.

**1. Claims 1, 17, 26, 30, 31, 38-42 are Patentable**

Independent Claim 1 of the present application provides a method that includes receiving a machine readable file containing a document that is to be served to a client for display on a client device. As recited, the organization of the documents in the file is expressed as a hierarchy of information. The method also includes deriving subdocuments from the hierarchy of information. As derived, the subdocuments are expressed in a format that permits the subdocuments to be served separately to the client. Further, at least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments.



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In contrast to the method of independent Claim 1, the Horowitz patent does not teach or suggest deriving subdocuments from a hierarchy of information such that at least one of the subdocuments is expressed in a format that permits the subdocument to be served separately to the client, where at least one of the subdocuments includes information that enables it to be linked to another one of the subdocuments. The Official Action, in fact, concedes that the Horowitz patent does not teach or suggest deriving subdocuments from the hierarchy of information of the document included in the machine readable file in a manner in accordance with independent Claim 1. Nonetheless, the Official Action alleges that the Wexler patent discloses this feature, and that it would have been obvious to one skilled in the art to modify the Horowitz patent to include this feature since smaller files are more easily downloaded and viewed using a web browser.

Applicants respectfully submit, however, that even if the Horowitz patent and the Wexler patent do disclose the respective elements of the claimed invention as alleged by the Official Action (although expressly not admitted as such by Applicants), the Horowitz patent and the Wexler patent cannot properly be combined to teach the claimed invention of independent Claim 1, as suggested by the Official Action. As explained above, the Horowitz system divides a document into subdocuments for the purpose of more efficiently performing text-based searches of the subdocuments. Thus, as the Horowitz system divides the document for the purpose of treating the subdocuments independent of one another, the Horowitz system would appear to have no need to provide a subdocument with information that enables it to be linked to another one of the subdocuments, as recited by independent Claim 1. In fact, Applicants respectfully submit that the intended purpose of the Horowitz system, i.e., performing text-based searches, would receive no appreciable benefit or advantage by including, in a subdocument, information linking it to another one of the subdocuments.

The Official Action alleges that one skilled in the art would be motivated to modify the system and method of the Horowitz patent to include a subdocument deriving feature of the Wexler patent to thereby provide the advantage of smaller files being downloaded and viewed using a web browser. Even presuming that the teachings of the Wexler patent result in smaller files that are advantageous for downloading and viewing using a web browser, however, the



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Horowitz patent does not disclose any functions that would enjoy those advantages. That is, the Horowitz patent does not teach or suggest downloading the results of a text-based search, or viewing such results using a web browser.

As indicated above, the Horowitz patent discloses a system and method for performing a text-based search of a database. More particularly, the Horowitz patent provides a computer system for performing the text based search of a database. As disclosed, the computer system includes a computer that interacts with a disk storage unit storing the database within which to perform the text-based search. The Horowitz patent does not disclose, however, downloading documents in the database or results of searching documents in the database, or viewing such documents or search results using a web browser. Further, even if the Horowitz patent did somehow teach or suggest downloading documents or search results from the database, the Horowitz patent does not teach or suggest downloading documents or search results in a manner that would benefit from the teachings of the Wexler patent. That is, the Horowitz patent does not teach or suggest downloading documents or search results in a manner that would benefit from smaller files generated by the Wexler patent. If anything, the disclosed arrangement of the Horowitz system suggests that the database is coupled proximate the computer. In such instances, as is well appreciated by those skilled in the art, data transfer latencies are often unaffected by file size due to the short distance traversed by data between the database and the computer such that any arguable advantage achieved by smaller file sizes are minimal, if any.

Applicants therefore respectfully submit that the Horowitz and Wexler patents cannot properly be combined to teach or suggest the claimed invention of independent Claim 1. Since the claimed invention of independent Claim 1 is patentably distinct from both the Horowitz and Wexler patents, taken individually, for the reasons described above, the rejection of independent Claim 1 is therefore overcome. Applicants also respectfully submit that the claimed invention of independent Claims 38 and 39 recite subject matter similar to that of independent Claim 1, and are therefore patentably distinct from the Horowitz and Wexler patents for at least the same reasons given above with respect to independent Claim 1. In this regard, independent Claims 38 and 39 recite an apparatus and machine-readable program, respectively, including receiving a



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machine readable file containing a document, and deriving subdocuments from the file, both in a manner similar to that of independent Claim 1.

Independent Claim 17 recites a method that includes receiving from a client a request for a document to be displayed on a client device. The method of independent Claim 17 also includes separately serving, to the client, a subdocument that represents less than all of the requested document, where the subdocument contains information that links it to at least one other subdocument. In addition, an invocation of the link to the other subdocument is received from the client, and the other subdocument is separately served to the client device.

Independent Claim 26 recites a method including displaying a subdocument of a document on a client device, and displaying an icon with the subdocument. In response to invocation of the icon, the method also includes fetching another subdocument of the document from a server and displaying the other subdocument on the client device. As recited, the subdocuments are less than the entire document, where the subdocuments are approximately the same size.

In contrast to the method of independent Claim 17, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest receiving (from a client) a request for a document, separately serving (to the client) a subdocument of the document that includes information linking it to at least one other subdocument, receiving an invocation (from the client) of the link to the other subdocument, and serving separately the other subdocument. And in contrast to the method of independent Claim 26, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest displaying a subdocument of a document along with an icon, and in response to invocation of the icon, fetching another subdocument of the document.

The Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. The Wexler patent also discloses that when the system encounters a link node of the document structure tree, the system resolves the link by finding the row in a link destination table providing requisite information relating to the link. Thus, it appears that the Wexler system itself rearranges the document from the subdocuments based



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upon the links listed in the link destination table. Upon request, then, the Wexler system would appear to rearrange the document from its constituent subdocuments without interaction from the client, much less without receiving, from the client, an invocation of the link to another subdocument from the served subdocument, as recited by independent Claim 17. Even in those instances of the subdocuments of the Wexler system including a link, however, the Wexler patent does not teach or suggest displaying an icon with a subdocument such that, upon invoking the icon, another subdocument is fetched and displayed, as recited by independent Claim 26.

Although independent Claims 17 and 26 recite similar subject matter to that of independent Claim 1, Applicants respectfully submit that independent Claims 17 and 26 include further features not taught or suggested by the Horowitz patent or the Wexler patent, taken individually or in combination. In this regard, Applicants note the first Official Action has summarily rejected independent Claims 17 and 26 along with independent Claim 1, explaining how the Official Action believes the Horowitz and Wexler patents teach or suggest the claimed invention of independent Claim 1. And although independent Claims 17 and 26 recite features similar to independent Claim 1, independent Claims 17 and 26 recite additional features the Official Action has failed to allege are disclosed by the Horowitz patent or the Wexler patent, or even failed to address. Applicants therefore respectfully request that those differing features of independent Claims 17 and 26 be addressed in the next Official Action so that Applicants may be fully aware of the manner in which the cited references are being applied to the claimed invention. As explained above, however, Applicants submit that neither the Horowitz patent nor the Wexler patent nor any combination thereof teaches or suggests the additional features recited by independent Claims 17 and 26.

Applicants therefore respectfully submit that the claimed invention of independent Claims 1, 17, 26, 38 and 39 are patentably distinct from the Horowitz patent and the Wexler patent, taken individually or in combination. Also, as dependent Claims 30, 31 and 40-42 depend, directly or indirectly, from respective ones of independent Claims 26 and 1, Applicants respectfully submit that dependent Claims 30, 31 and 40-42 are patentably distinct from the Horowitz patent and the Wexler patent, taken individually or in combination, for at least the same reasons given above with respect to independent Claims 26 and 1. In addition, Applicants



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respectfully submit that various ones of dependent Claims 30, 31 and 40-42 recite features further patentably distinct from the Horowitz patent and the Wexler patent, taken individually or in combination.

For example, Claim 30 (depending from independent Claims 1, 17 or 21) further recites that the subdocuments are derived from the document at the time of a request from the client device for the document. In contrast, Applicants respectfully submit that neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest when a document is divided into subdocuments, much less in relation to receiving a request from a client device for the document. In fact, both the Horowitz patent and the Wexler patent suggest that the documents of the respective systems are divided well in advance of receiving any type of request from a user. In this regard, the Horowitz system divides a document into subdocuments when inverting the database, after which term lists are generated and stored in accordance with a run length encoding technique. As the encoded term lists are then used in a text-based search operation, the Horowitz system necessarily divides the document into subdocuments well before receiving the text-based search request. The Wexler patent similarly discloses that its technique of organizing components of a document in a structural manner permits global operations to be performed based upon the structural organization.

Also, for example, in contrast to the method of dependent Claim 31, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments based upon characteristics of the client device. The Official Action cites the Horowitz patent for support of this feature of the claimed invention. Applicants respectfully submit, however, that even considering that the Horowitz patent discloses a client device for displaying search results, the Horowitz patent does not teach or suggest dividing documents of a database based upon characteristics of the client device. In this regard, as explicitly disclosed by the Horowitz patent, documents are divided based upon paragraph boundaries of the documents. Similarly, the Wexler patent discloses dividing documents based upon section segments of the documents. Therefore, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving subdocuments based upon characteristics of the client device, as recited by dependent Claim 31.



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**2. Claims 3-8 are Patentable**

The Official Action rejects Claims 3-8 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the method of independent Claim 1 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 3-8 each depend, directly or indirectly, from independent Claim 1, Applicants respectfully submit that dependent Claims 3-8 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above with respect to independent Claim 1.

In addition, in contrast to the method of dependent Claim 8, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest receiving the file (including the document) expressed in a language that does not organize segments of the document in a hierarchy, and deriving the subdocuments by first converting the file to a language that organizes segments of the document in a hierarchy. The Official Action alleges that the Horowitz patent discloses this feature of the claimed invention in columns 3-4. Applicants respectfully submit, however, that with respect to dividing a document into subdocuments, the Horowitz patent merely discloses that the subdocuments generally correspond to paragraphs of the document. The Horowitz patent does not teach or suggest converting a file containing the document from one language to another, much less from a language that does not organize segments of the document in a hierarchy, to a language that does organize segments of the document in a hierarchy, as recited by dependent Claim 8.

**3. Claims 9 and 29 are Patentable**

The Official Action also rejects Claims 9 and 29 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the methods of independent Claims 1 and 26 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claim 9 and 29 each depend, directly or indirectly, from independent Claims 1 and 26, respectively, Applicants respectfully submit that dependent Claims



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9 and 29 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above with respect to independent Claims 1 and 26.

In addition, in contrast to the method of dependent Claim 29, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest that only a portion of each subdocument of the document is displayed at one time (Claim 27), where an indication of the position of the currently displayed subdocument in a series of subdocuments is also displayed (Claim 28), and where the indication includes the total number of subdocuments in the series and the position of the currently displayed document in the sequence (Claim 29). In fact, other than possibly suggesting the display of results of a text-based search, the Horowitz patent does not teach or suggest any manner of displaying the search results, much less only displaying a portion of subdocuments into which documents of the database is divided, or displaying an indication of the position of the displayed subdocument within a series of subdocuments. Likewise, the Wexler patent does not teach or suggest the manner of displaying a subdocument, or an indication of position of the displayed subdocument, in a manner similar to that of dependent Claims 27-29.

#### 4. Claims 10, 18 and 22 are Patentable

In addition, the Official Action rejects Claims 10, 18 and 22 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above and below, the methods of independent Claims 1, 17 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 10, 18 and 22 each depend, directly or indirectly, from respective ones of independent Claims 1, 17 and 21, Applicants respectfully submit that dependent Claims 10, 18 and 22 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claims 1, 17 and 21.

#### 5. Claims 11 and 23 are Patentable

The Official Action rejects Claims 11 and 23 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above and below, the methods of independent



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Claims 1 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 11 and 23 each depend, directly or indirectly, from independent Claims 1 and 21, respectively, Applicants respectfully submit that dependent Claims 11 and 23 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claims 1 and 21.

In further contrast to the methods of dependent Claims 11 and 23, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest that subdocuments are requested by the client based on the contained information that enables the subdocuments to be linked to other subdocuments (Claim 11), where the information comprises a URL (Claim 23). Conceding that the Horowitz patent does not teach or suggest these features, the Official Action alleges that the features are disclosed by the Wexler patent, and that it would have been obvious to one skilled in the art to modify the Horowitz system and method to include the feature to provide a natural flow from one document to the next.

As explained above with respect to independent Claim 17, the Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. The Wexler patent also discloses that when the system encounters a link node of the document structure tree, the system resolves the link by finding the row in a link destination table providing requisite information relating to the link, thereby suggesting that the system itself rearranges the document from the subdocuments based upon the links listed in the link destination table. In contrast to the Official Action, however, nowhere does the Wexler patent teach or suggest that a user requests a subdocument based on information (e.g., URL) in a subdocument that enables the subdocument to be linked to another of the subdocuments, as recited by dependent Claim 11. Moreover, even if the Wexler patent did disclose such a request, nowhere does the Wexler patent teach or suggest that the information enabling a subdocument to be linked to another subdocument comprises a URL, as recited by dependent Claim 23. If anything, the Wexler patent discloses that the links are provided via a tree structure notation for rearranging a document from subdocuments.



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**6. Claims 12, 24, 25, 27 and 28 are Patentable**

The Official Action rejects Claims 12, 24, 25, 27 and 28 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above and below, the methods of independent Claims 1, 21 and 26 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 12, 24, 25, 27 and 28 each depend, directly or indirectly, from respective ones of independent Claims 1, 21 and 26, Applicants respectfully submit that dependent Claims 12, 24, 25, 27 and 28 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claims 1, 21 and 26.

Also in contrast to the method of dependent Claim 12, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest identifying a portion of the document that is to be displayed separately from the rest of the document, excluding that portion from the subdocument in which that portion would have otherwise appeared, and including that portion in at least one corresponding subdocument. Further in contrast to the method of dependent Claim 12, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest that when the subdocument in which the excluded portion would otherwise have appeared is served to the client device, embedding a graphical device that can be invoked by the user to retrieve the subdocument that includes that portion that is to be displayed separately from the rest of the document. The Official Action alleges that the Horowitz patent discloses these features of the claimed invention. Applicants respectfully submit, however, that the Horowitz patent is merely concerned with effectively performing a text-based search of a database. Thus, at no point does the Horowitz patent teach or suggest identifying a portion of a document, and excluding that portion from the subdocument within which that portion would otherwise have appeared, as recited by dependent Claim 12. Correspondingly, the Horowitz patent does not teach or suggest serving a subdocument from which a portion has been excluded, including an embedded graphical device that can be invoked to retrieve the subdocument including the portion to be displayed separately, as also recited by dependent Claim 12.

Dependent Claims 27 and 28 recite that only a portion of each subdocument of the document is displayed at one time (Claim 27), where an indication of the position of the



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currently displayed subdocument in a series of subdocuments is also displayed (Claim 28). In further contrast to the method of dependent Claims 27 and 28, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest that only a portion of each subdocument is displayed at one time, or that an indication of the position of the currently displayed subdocument in a series of subdocuments is displayed. In this regard, as explained above with respect to dependent Claim 29, other than possibly suggesting the display of results of a text-based search, the Horowitz patent does not teach or suggest any manner of displaying the search results, much less only displaying a portion of subdocuments into which documents of the database is divided, or displaying an indication of the position of the displayed subdocument within a series of subdocuments. As also explained above with respect to dependent Claim 29, the Wexler patent does not teach or suggest the manner of displaying a subdocument, or an indication of position of the displayed subdocument, in a manner similar to that of dependent Claims 27 and 28.

**7. Claims 13, 14, 19-21 and 37 are Patentable**

The Official Action rejects Claims 13, 14, 19-21 and 37 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the method of independent Claim 17 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 19 and 20 each depend from independent Claim 17, Applicants respectfully submit that dependent Claims 19 and 20 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claim 17.

Independent Claim 13 of the present application recites a method that includes receiving, from an origin server, a machine readable file containing a document that is to be served to a client for display on a client device, the file being expressed in a language that does not organize segments of the document in a hierarchy, and converting the file to a language that organizes segments of the document in a hierarchy. The method also includes traversing the hierarchy and assembling subdocuments from the segments, where at least some of the subdocuments are assembled from more than one of the segments. As recited, assembling of the subdocuments



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conforms to an algorithm that tends to (a) balance the respective sizes of the sub-documents, (b) favor assembling the subdocuments from segments that have common parents in the hierarchy, and (c) assemble the subdocuments from segments for which replications of nodes in the hierarchy is not required. At least one of the subdocuments is also expressed in a format that permits it to be served separately to the client, where at least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments. Further, as requested by the client, the subdocuments are individually served to the client based on the contained information that enables it to be linked to another of the subdocuments.

In contrast to the method of independent Claim 13, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest receiving the file (including the document) expressed in a language that does not organize segments of the document in a hierarchy, and deriving the subdocuments by first converting the file to a language that organizes segments of the document in a hierarchy, as explained above with respect to dependent Claim 8. In addition, neither the Horowitz patent nor the Wexler patent teach or suggest deriving subdocuments from a hierarchy of information such that at least one of the subdocuments is expressed in a format that permits the subdocument to be served separately to the client, as explained above with respect to independent Claim 1, the Official Action conceding as much with respect to the Horowitz patent. Again, however, even if the Horowitz patent and the Wexler patent do disclose the respective elements of the claimed invention as alleged by the Official Action (although expressly not admitted as such by Applicants), the Horowitz patent and the Wexler patent cannot properly be combined to teach the claimed invention of independent Claim 1, and similarly independent Claim 13, as suggested by the Official Action.

Amended independent Claim 14 provides a machine-readable document held on a storage medium for serving to a client, the document being organized as a set of subdocuments. As recited, the subdocuments comprise an assembly of segments of the document that are part of a hierarchical expression of the document, where the subdocuments are of approximately the same size. Further, the subdocuments contain information that enables the subdocument to be linked to another of the subdocuments which, as amended, includes a URL. In contrast to the method of independent Claim 14, neither the Horowitz patent nor the Wexler patent, taken individually



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or in combination, teach or suggest a document including an assembly of subdocuments that include a URL linking the subdocument to other subdocuments, as explained above with respect to dependent Claim 23. Again, as explained above with respect to independent Claim 17, the Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. However, nowhere does the Wexler patent teach or suggest that information in a subdocument that enables the subdocument to be linked to another of the subdocuments comprises a URL, as recited by independent Claim 14. If anything, the Wexler patent discloses that the links are provided via a tree structure notation for rearranging a document from subdocuments.

Independent Claim 21 of the present application provides a method that includes receiving, from a server at a client device, a subdocument of a larger document for display on the client device, and displaying the subdocument on the client device. The method also includes receiving at the client device a request of a user to have displayed another subdocument of the larger document. The other subdocument is received separately from the server at the client device, and displayed on the client device, where the subdocuments are substantially the same length.

In contrast to the method of independent Claim 21, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest receiving and displaying a subdocument of a larger document, receiving a request to display another subdocument, and separately receiving the other subdocument (the subdocuments being of substantially the same length), as explained above with respect to independent Claim 17. The Wexler patent does disclose dividing a document into subdocuments, where a number of subdocuments include links from a parent subdocument to thereby create a natural flow from one subdocument to the next. The Wexler patent also discloses that when the system encounters a link node of the document structure tree, the system resolves the link by finding the row in a link destination table providing requisite information relating to the link. Thus, it appears that the Wexler system itself rearranges the document from the subdocuments based upon the links listed in the link destination table. In contrast, the method of independent Claim 21 recites that a subdocument is



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received and displayed by a client device, which also requests another subdocument that is separately received and displayed by the client device.

Independent Claim 37 recites an apparatus including a network server configured to receive a machine readable file containing a document that is to be served to a client for display on a client device. The server is also configured to derive subdocuments from the file, where at least one of the subdocuments is expressed in a format that permits it to be served separately to the client. As also recited, at least one of the subdocuments contains information that enables it to be linked to another one of the subdocuments. In contrast to the apparatus of independent Claim 37, neither the Horowitz patent nor the Wexler patent teach or suggest a network server configured to derive subdocuments from a hierarchy of information such that at least one of the subdocuments is expressed in a format that permits the subdocument to be served separately to the client, as explained above with respect to independent Claim 1, the Official Action conceding as much with respect to the Horowitz patent. Yet again, however, even if the Horowitz patent and the Wexler patent do disclose the respective elements of the claimed invention as alleged by the Official Action (although expressly not admitted as such by Applicants), the Horowitz patent and the Wexler patent cannot properly be combined to teach the claimed invention of independent Claim 1, and similarly independent Claim 37, as suggested by the Official Action.

**8. Claims 32 and 33 are Patentable**

The Official Action further rejects Claims 32 and 33 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the methods of independent Claims 1, 17 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 32 and 33 each depend, directly or indirectly, from independent Claims 1, 17 or 21, Applicants respectfully submit that dependent Claims 32 and 33 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claim 1, 17 and 21.

Also in contrast to the method of dependent Claims 32 and 33, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments based upon characteristics of the client device, as recited by dependent Claim 31



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and by dependency Claims 32 and 33, and as explained above. Further, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments based upon characteristics that are provided by the client in connection with the request (Claim 32), and where the characteristics include the display capabilities of the client device (Claim 33). The Official Action cites the Horowitz patent for support of these features of the claimed invention. Applicants respectfully submit, however, that even considering that the Horowitz patent discloses a client device for displaying search results, the Horowitz patent does not teach or suggest dividing documents of a database based upon characteristics of the client device. In this regard, as explicitly disclosed by the Horowitz patent, documents are divided based upon paragraph boundaries of the documents. Similarly, the Wexler patent discloses dividing documents based upon section segments of the documents. Therefore, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving subdocuments based upon characteristics (e.g., display capabilities) of the client device, where those characteristics are received in a request for the document, as recited by dependent Claims 31-33.

9. Claims 34-36 are Patentable

The Official Action further rejects Claims 34-36 as being unpatentable over the Horowitz patent, in view of the Wexler patent. As explained above, the methods of independent Claims 1, 17 and 21 are patentably distinct from the system and method of the Horowitz patent and the Wexler patent. As dependent Claims 34-36 each depend, directly or indirectly, from independent Claims 1, 17 or 21, Applicants respectfully submit that dependent Claims 34-36 are patentably distinct from the Horowitz patent and the Wexler patent for at least the same reasons given above and below with respect to independent Claim 1, 17 and 21.

Moreover, in contrast to the method of dependent Claim 36, neither the Horowitz patent nor the Wexler patent, individually or in combination, teach or suggest deriving the subdocuments at a wireless communication gateway. In fact, neither the Horowitz patent nor the Wexler patent teach or suggest that any functions are performed at a communication gateway, much less a wireless communication gateway.



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As explained above, the claimed invention of Claims 1, 3-15 and 17-42 is patentably distinct from the system and method of the Horowitz patent and the Wexler patent. Applicants therefore respectfully submit that the rejection of Claims 1, 3-15 and 17-42 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz, in view of the Wexler patent, is overcome.

***B. Claims 2 and 16 are Patentable over Horowitz/Wexler/Burkett***

The Official Action rejects dependent Claims 2 and 16 as being unpatentable over the Horowitz patent in view of the Wexler patent, and further in view of the Burkett patent. As recited, dependent Claims 2 and 16, which depend from independent Claims 1 and 14, respectively, further recite that the language providing the hierarchical expression of the document comprises the extensible markup language (XML). In this regard, the Official Action alleges that the combination of the Horowitz patent and the Wexler patent disclose the claimed invention of independent Claims 1 and 14, but neither of which disclose expressing hierarchical information in XML. For this feature, the Official Action cites the Burkett patent, and alleges that one skilled in the art would be motivated to combine the XML feature of the Burkett patent with the Horowitz/Wexler patent combination to more efficiently process the document by selectively streaming document fragments.

As explained above, the Horowitz patent and the Wexler patent cannot properly be combined to teach or suggest the claimed invention of independent Claim 1, and by dependency Claim 2. Even considering that the Burkett patent discloses providing a document in the XML language, Applicants respectfully submit that the Burkett patent does not overcome the deficiencies in the Horowitz and Wexler patents. In this regard, because the Horowitz and Wexler patents cannot properly be combined to teach or suggest the claimed invention of independent Claim 1, the Horowitz, Wexler and Burkett patents cannot properly be combined to teach or suggest the claimed invention of Claim 2, which depends from independent Claim 1.

As also explained above, neither the Horowitz patent nor the Wexler patent, taken individually or in combination, teach or suggest a document including an assembly of subdocuments that include a URL linking the subdocument to other subdocuments, as recited by amended independent Claim 14, and by dependency Claim 16. Likewise, even considering that



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the Burkett patent discloses providing a document in the XML language, Applicants respectfully submit that the Burkett patent does not teach or suggest a document including an assembly of subdocuments that include a URL linking the subdocument to other subdocuments.

Therefore, Applicants respectfully submit that the invention of dependent Claims 2 and 16 is patentably distinct from the Horowitz, Wexler and Burkett patents. As such, Applicants respectfully submit that the rejection of Claims 2 and 16 under 35 U.S.C. § 103(a) as being unpatentable over the Horowitz in view of the Wexler patent, and further in view of the Burkett patent, is overcome.



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### CONCLUSION

In view of the amendments to the claims, and the remarks presented above, Applicants respectfully submit that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact Applicants' undersigned attorney in order to resolve any remaining issues.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,




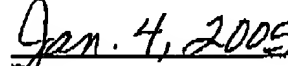
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#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the US Patent and Trademark Office at Fax No. (703) 872-9306 on the date shown below.

  
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